Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application using (Original) (Currently Amended) (New) (Canceled) (Previously Presented) nomenclature, as recited in the below listing of claims.

1.(Canceled)

2. (Currently Amended) A system for communicating an analog input signal as a modulated binary laser signal over an optical communication medium recovered as a digital output signal, the system comprising,

a sigma delta modulator for receiving the analog input signal and modulating the analog signal into a modulated symbol signal,

a transmitter for converting the modulated symbol signal into the modulated binary laser signal, and for transmitting the modulated binary laser signal over the optical communication medium, the modulated binary laser signal having a pulse width having a duration representative of the analog input signal,

a receiver for receiving and detecting the pulse width of modulated binary laser signal for providing a received symbol signal, and

a digital filter for filtering the symbol signal into the digital output signal, ~~The system of claim 1~~

wherein the transmitter comprises,

a symbol to binary converter for converting the modulated symbol signal from the sigma delta modulator into a converted digital signal, and

a pulse width modulator for modulating the laser signal by the converted digital signal into the modulated binary laser signal as a pulse width binary modulated laser signal communicated over the optical communication medium.

3. (Original) The system of claim 2 wherein the receiver comprises,

a pulse width detector receiving the pulse width modulated binary laser signal and for providing a detected binary signal, and

a binary to symbol converter for converting the detected binary signal into the received symbol signal.

4. (Previously Presented) The system of claim 3 wherein,

the pulse width detector is a pulse width quantizer detector, the detected binary signal is a detected quantized signal, and

the binary to symbol converter converts the detected quantized signal into the received symbol signal.

5. (Currently Amended) The system of claim ~~1~~ 2 further comprising,

a timing recovery loop for generating a timing signal from the receive symbol signal for clocking the digital filter.

6. (Currently Amended) The system of claim ~~1~~ 2 wherein,

the sigma delta modulator is a first order sigma delta modulator.

7. (Currently Amended) The system of claim ~~1~~ 2 wherein,

the sigma delta modulator is a second order sigma delta modulator.

8. (Currently Amended) The system of claim ~~1~~ 2 wherein the optical communication medium is selected from the group consisting of free space and a fiber optic.

9. (Canceled)

10. Canceled)

11. (Canceled)

12. (Currently Amended) The system of claim ~~1~~ 2 wherein the modulated ~~digital~~ binary laser signal is communicated over the optical communication medium without the use of frame words.

13. (Currently Amended) The system of claim ~~11~~ 21 wherein the modulated ~~digital~~ binary laser signal is communicated over the optical communication medium without the use of frame words.

14. (Currently Amended) The system of claim ~~1~~ 2 wherein,

the modulated ~~digital~~ binary laser signal is a pulse having a pulse width indicating the analog input signal, and

the pulse is a laser pulse communicated over the optical communication medium.

15. (Canceled)

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16. (Currently Amended) The system of claim ~~11~~ 21 wherein the optical communication medium is selected from the group consisting of free space and a fiber optic.

17. (Currently Amended) The system of claim ~~1~~ 3 wherein the receiver comprises,

a pulse width detector for detecting the pulse width of the modulated binary laser signal laser pulses of the communicated signal and provides binary values,

a binary to symbol converter for changing the binary values from the pulse width detector into symbols, the digital filter for filtering the symbols for providing a clocked digital output signal, the digital filter filtering a continuous stream of symbols.

18. (Previously Presented) The system of claim 17 further comprising,

a timing recovery loop for receiving the symbols and for clocking the digital filter for providing the clocked digital output signal.

19. (Previously Presented) The system of claim 18 wherein,

the timing recovery loop recovers from the symbols a sample rate to provide a clock signal to the digital filter, and

the clocked digital output is an n bit digital sample of the analog input signal, the digital filter filtering a continuous stream of symbols.

20. (Previously Presented) The system of claim 19 wherein,

the system does not use parallel to serial conversion, frame synchronization, data reclocking, forward error correction, or significant bit reordering for generating the clocked digital output signal.

21. (Currently Amended) A system for communicating an analog input signal as a pulse width modulated binary laser signal over an optical communication medium recovered as a digital output signal, the system comprising

a sigma delta modulator for receiving the analog input signal and modulating the analog signal into a modulated symbol signal,

a transmitter for converting the modulated symbol signal into a converted digital signal for pulse width modulating a laser signal into the pulse width modulated binary laser signal, and for transmitting the pulse width modulated binary laser signal over the optical communication medium, the modulated binary laser signal having a pulse width having a duration representative of the analog input signal, the modulated binary laser signal being transmitted through the optical communication medium,

a receiver for receiving and detecting the pulse width of the pulse width modulated binary laser signal to provide a detected binary signal and for converting the detected binary signal into a received symbol signal, and

a digital filter for filtering the symbol signal into the digital output signal, ~~The system of claim 11~~

wherein the receiver comprises,

a pulse width detector for detecting the duration of the pulse width of the modulated binary laser signal laser pulses of the communicated signal and provides binary values, and

a binary to symbol converter for changing the binary values from the pulse width detector into symbols, the digital filter for filtering the symbols for providing a clocked digital output signal.

22. (Previously Presented) The system of claim 21 further comprising,

a timing recovery loop for clocking the digital filter for providing the clocked digital output signal,

wherein,

the timing recovery loop recovers from the symbols a sample rate to provide a clock signal to the digital filter, and

the clocked digital output is an n bit digital sample of the analog input signal.

23. (Previously Presented) The system of claim 22 wherein,

the system does not use parallel to serial conversion, frame synchronization, data reclocking, forward error correction, or significant bit reordering for generating the clocked digital output signal.

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